

said rim liner strain-to-failure capability and ratio R_1 being such that said rim liner remains in compressive contact with said rim throughout operation of said flywheel system.

10. A process of coupling a flywheel rim to a flywheel hub, comprising:
 - mounting said rim on a rim liner; and
 - coupling said rim liner to said hub with a torque coupling that allows said liner to grow radially with respect to said hub while remaining concentric thereto during operation.
13. A process as defined in claim 10, wherein:
 - said rim includes an inner annulus of E-glass/epoxy and an outer annulus of carbon fiber/epoxy having less material than said E-glass annulus;
 - whereby said carbon fiber/epoxy annulus is large enough to provide sufficient hoop strength to contain radial forces created in said rim by rotation while allowing significant radial growth of said rim away from said hub, and said rim liner maintains torque coupling and concentricity of said rim and said hub during said operation despite said radial growth.
15. A flywheel system, comprising:
 - a hub;
 - a flywheel rim concentric on said hub having a carbon fiber/epoxy outer annulus and, contiguous therewith, an E-glass inner annulus with an inner circumferential surface;
 - a rim liner engaged with said inner circumferential surface of said inner annulus;
 - said rim liner being made of a material that grows radially with said rim and has sufficient strength to transmit torque between said rim and said hub during flywheel spin-up and during energy recovery from said flywheel; and
 - a torque coupling between said hub and said rim liner that allows said liner to grow radially with respect to said hub while remaining concentric thereto during operation.